

round-level gardens, which are, arguably, reinterpretations of ideas, have existed for centuries, but vertical gardens and green walls are a genuinely new design phenomenon. Of course, nature has been happily gardening vertically since the dawn of time, clothing rocky slopes with foliage among the scree and greening exposed cliffs. But the concept of consciously carpeting a building, inside or out, with a cloak of plants began in earnest with French botanist Patrick Blanc.

Blanc created his first public vertical garden in Paris in 1986, but it was his later collaborations with architect Jean Nouvel that "normalized" the concept of gardening in this way. In 2004, the duo created a vertical garden at the Quai Branly Museum in Paris that captured the global imagination. The exterior façade of this modest building was transformed into a living tapestry of texture and color, and the concept of green walls was established. "I am very happy to have created a new trend, because my aim was always to achieve a connection between the city, the people, and the plants," Blanc says today. But he is relaxed about the way his ideas have been adopted by other architects and designers. "I cannot cover all the walls in the world with plants by myself, so it's good to have some helping hands," he laughs.

After a slow burn, the popularity of living walls is finally gaining pace in the residential sector, and the sight of a man-made jungle snaking towards the sky can be breathtaking—particularly in more temperate climates. "Vertical gardens work anywhere in the world, but they're always about creating the unexpected," observes Daniel Bell, an English designer now based in Sweden, who has previously collaborated with Blanc. "There's simply something very magical about seeing plants growing in a different direction."





Bell believes that any vertical garden should feature an intense diversity of plant variety, leaf texture, and color in order to experience seasonal changes, but the wide variety of systems and suppliers across the globe means that design possibilities are now virtually limitless.

Living walls have many practical advantages, too. Unlike more traditional forms of architectural cladding, a carpet of plants will insulate or cool down buildings, depending on the climate. Plants work hard outdoors to combat urban air pollution and, indoors, they encourage a more productive environment while invisibly improving air quality, research has found. This makes living walls an obvious choice for the eco-generation.

"Millennials love plants and they want to live among them," says Hal Thorne, CEO of GSky Plant Systems, a leading creator of vertical gardens in the United States. "Now that many people have much smaller spaces in which to create a garden, a living wall can be very impactful."

Certainly, a vertical garden can have a tiny footprint yet still contain many different plant >>

New leaves: Designs by Patrick Blanc include the Rainforest Chandelier in the EmQuartier mall in Bangkok, Thailand (above); a giant living wall in the GREEN cafe in Hong Kong's Hotel ICON (opposite); and a climbingplant design at Le Nouvel residences in Kuala Lumpur, Malaysia (left). GARDEN DESIGN #F# GARDEN DESIGN

species. "I had a challenging project in Kuala Lumpur with Jean Nouvel," recalls Blanc. "Unusually, I used 240 different species and the result was a 200-meter-high [656 feet] botanical garden on a vertical scale." As Bell observes, the concept is also easily adapted for rooftops and city gardens, where a virtually hydroponic approach dispenses with the need for soil.

However, perhaps the greatest benefit of living walls and vertical gardens is the opportunity they provide for endless creativity. A wall of plants blurs boundaries between inside and out, particularly when the green wall appears to grow seamlessly between the two. Swedish landscape architect Michael Hellgren, of Vertical Garden Design, created an elegant example of this at Natura Towers in Lisbon: ferns and broad-leaved perennials cover walls outdoors, evolving into a palette of tender exotics inside the lobby.

"Visiting a really biodiverse natural area, like a tropical forest, is a fascinating and intense experience, and I like our gardens to express some of that same life and energy," explains Hellgren. "More than simply creating a graphic pattern, I aim to give each plant a setting where it can develop to its full potential."

Green walls can soften modernist and brutalist architecture beautifully, taking the place of traditional cement render or timber cladding, and can add a magical sense of movement to an otherwise static space. When plants are positioned in waves and curves, the leaves appear to ripple in the breeze, which creates gentle murmurs of movement across the walls. GSky created a







European glory: Swedenbased Vertical Garden Design created three areas at a private villa in Portugal (left), and three walls at Natura Towers, a company HQ in Lisbon (below). Northern exposure: Green Over Grey of Canada used more than 10,000 plants for the Semiahmoo Library wall in Vancouver (top), and around 8,000 for a mall project in nearby Surrey (above).



Versatile product: At Airbnb's San Francisco headquarters, GSky Plant Systems installed its user-friendly Versa Wall, customized with 1,226 square feet of greenery, stretching three floors high.



wonderful composition at the headquarters of Airbnb in Brannan Street, San Francisco, when briefed to reimagine the city's undulating streets as a huge panel of plants. A living wall can even be an extension to a green roof, manipulating perspective and introducing a sense of playfulness to an otherwise simple structure.

Grown on a wall facing an outdoor staircase, plants can be appreciated in detail as you descend the stairs, while mini vertical gardens can be planted in freestanding panels as space dividers or hung as exterior artwork. "I think the best way to view a living wall is like a painting, except the plants are the paint and the wall is the canvas," says Mike Weinmaster, chief designer at Canada's Green Over Grey. "I love creating abstract green wall designs with lots of contrasting color. All the attributes of a painting—color, texture, pattern, and drama—can be applied to a living wall."

Another approach is to create a tapestry of plants inspired by a classic painting style. This idea was adopted to clever effect in 2011 at the National Gallery in London when Vincent van Gogh's *A Wheatfield*, *With Cypresses* was re-created from more than 8,000 plants.

Patricia Fox, of London-based Aralia Garden Design, has created a number of award-winning living walls, and has many inspired suggestions. "The vertical garden doesn't have to be the star of the show," she says. "It can be used as a backdrop to other focal points, such as an illuminated sculpture—especially if you use dense, textural evergreen plants." In the past she has used different types of lettuce to create an edible living wall, and a vertical "box parterre" interplanted with fresh herbs to create a herbal tea bar.

"Using herbals and edibles in a green wall is a lovely way to enhance an outdoor kitchen, and helps to turn open-air cooking into a real performance—it's very sexy from an entertaining point of view," she adds. "Tiny alpine strawberries can be picked by guests and popped straight into a glass of champagne."

GROWING OPPORTUNITIES

The practicalities of creating a living wall can be complex, involving construction, planting design, irrigation, lighting, and ongoing maintenance. While off-the-shelf, do-it-yourself options, such as Treebox and Woolly Pockets, are available for smaller areas, a designer or landscape architect specializing in green walls is the sensible choice for large or complex designs. Living walls are always evolving, too. In the long term, GSky's Thorne believes that functionality will take over from artistic possibility. "You could start to integrate green walls more fully into air-handling systems, and irrigate them sustainably using recycled and recirculated water."

Meanwhile, Blanc always has one eye on the future. "People usually commission me because they know I will do something different. This ensures that the concept of vertical gardens is always moving forward—whether it's a vertical garden for shade, only covering part of a wall, or creating freestanding vertical structures. At home, I've also created a huge aquarium with a vertical garden. I would love to create that for a client but no one has asked me yet. So, that could be another new direction."

Aileen Scoular is a lifestyle journalist and awardwinning garden designer.

On the market

GREEN LIVING



Wildlife Road

Malibu, California, USA A gated drive leads to this pristine compound overlooking the Pacific Ocean, where a canopy of specimen trees punctuated by brightly colored flowers awaits. Once the home of former Tonight Show host Johnny Carson. it features an indoor arboretum, a 30-foot high glass ceiling, and original stone floors, while four acres of park-like grounds offer private access to the beach below. \$81,500,000 Hilton & Hyland Linda May +1 310 492 0735



Exclusive mansion

Bogotá, Colombia A vertical garden would be the perfect addition to this residence, which is bordered by a tranquil stream and enveloped by century-old trees. Luxury and comfort are the guiding principles in the 16,000-square-foot home, which is arranged across three levels with triple-height windows. The upper level features two sumptuous living rooms, a studio, and an open-plan kitchen. Price upon request Julio Corredor & CIA Verónica Dávila +57 310 295 1058

www.luxurydefined.com www.luxurydefined.com